L 00676-67
ACC NR: AP6017860

laxing elements with short relaxation times of the extended systems indicates the presence of carbon black - polymer bonds, comparable in strength to intermolecular bonds, since the carbon black surface has an assortment of adsorption centers with various energies (more or less weaker than the energy of intermolecular interaction). The reinforced structure of the polymer is created in the presence of strong adsorption centers. The data obtained confirm the concepts advanced in the literature, according to which the reinforced filler - polymer coagulation structures are mosaic in character. Indeed, the most active from the standpoint of reinforcing effect is carbon black characterized by the presence of a small number of highly active adsorption centers on a background of relatively low activity. It is concluded that in an extended rubber the polymer is present in the form of two structures, one unchanged and the other reinforced, and that there is no distinct boundary between them. Orig. art. has: 2 figures, 1 table, and 3 formulas.

SUB CODE: 11/ SUBM DATE: 03Jan65/ ORIG REF: 012/ OTH REF: 003

Card 2/2 vlr

ACC NR: AP6037027 (N) SOURCE CODE: UR/0374/66/000/005/0693/0699

AUTHOR: Zelenev, Yu. V.; Novikov, A. G.

ORG: Laboratory of Polymer Physics Problems, Moscow State Pedagogical Institute im. V. I. Lenin (Problemnaya laboratoriya fiziki polimerov, Moskovskiy gosudarstvennyy pedagogicheskiy institut)

TITLE: Effect of temperature on the change of the stressed state of teflon seals

SOURCE: Mekhanika polimerov, no. 5, 1966, 693-699

TOPIC TAGS: vacuum seal, teflon, stress relaxation

ABSTRACT: In connection with the lack of methods for estimating the performance of teflon parts of sealing systems as a function of changes in the temperature of the ambient medium, the article analyzes problems involved in time-limited shifts from one temperature to another. It is assumed that the process of fast relaxation has already occurred and that the shift in temperature does not cause the stress relaxation processes to accelerate. Cases of both uniaxial and volume loading of teflon specimens are considered. Formulas are derived for (1) the decrease in stress during the temperature change in a uniaxially compressed teflon specimen, (2) lateral pressure on the teflon specimen during its compression in a closed volume, and (3) decrease in compressive stress of the teflon specimen in a closed volume during its cooling. It is shown that in order to reduce the decrease in stress with temperature,

Card 1/2 UDC: 678:01.53

ACC NR: AP6037027

it is necessary to try to obtain smaller geometrical dimensions of the polymer seal and to [illegible] the rigidity of the holding [illegible]. 2 figures and 7 formulas.

SUB CODE: 11/ SUBM DATE: 15Jan66/ ORIG REF: 005/ OTH REF: 001

Card 2/2

ACC NR: AR6013661 SOURCE CODE: UR/0058/65/000/010/E019/E019

AUTHOR: Zelenev, Yu. V.; Molotkov, A. P.

TITLE: A physical basis for a macroscopic model of linear polymers

SOURCE: Ref. zh. Fizika, Abs. 10E136

REF SOURCE: Uch. zap. Mosk. obl. ped. in-ta, v. 147, 1964, 151-159

TOPIC TAGS: linear polymer, mathematic model, polymer physical chemistry

TRANSLATION: A model made up of a set of linear elastic and inelastic elements, including one nonlinear element (a nonlinear viscosity) is proposed to describe the mechanical behavior of polymer systems, especially linear polymers. A specific physical mechanism is associated with each element of the model. Equations for the model are derived and analyzed for the simplest cases of mechanical behavior (dynamic testing, stress, relaxation, creep). The relationships qualitatively reflect the behavior of linear polymers in vitrified highly-elastic and viscous-flow state, but only for polymers with sufficiently pliable chains. An electrical model was constructed analogous to the proposed mechanical model. A. Malkin.

SUB CODE: 07,11,20

Card 1/1

RUBIN, B.A.; ZELENEVA, I.V.

Effect of some inhibitors on the respiration of cucumber plants infected by the cucumber mosaic virus. Fiziol. rast. 11 no.5:769-773 S-O '64. (MIRA 17:10)

1. Chair of Plant Physiology, Biology Department of Moscow State University.

RUBIN, B.A.; ZELENEVA, I.V.

Change in the activity of cytochrome oxidase and peroxidase in leaves of a cucumber infected by cucumber mosaic virus. Dokl. AN SSSR 157 no.3:720-722 Jl '64. (MIRA 17:7)

1. Kafedra fiziologii rasteniy Moskovskogo gosudarstvennogo universiteta imeni Lomonosova. Predstavleno akademikom V.N. Shaposhnikovym.

GARBER, Yu.N.; ZELENEVSKAYA, S.I.; RABUKHINA, G.G.

Using azeotropic rectification for seperating isomers having their boiling points close to each other (system m-xylene - n-xylene). Zhur.prikl.khim. 33 no.3:694-700 Mr '60. (MIRA 13:6)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Xylene) (Distillation, Fractional)

RUBIN, B.A.; ZELENEVA, L.V.

Some characteristics of the respiration of cucumber leaves infected with cucumber mosaic virus. Nauch. dokl. vys. shkoly; biol. nauki no.1:142-146 '65. (MIRA 18:2)

1. Rekomendovana kafedroy fiziologii rasteniy Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.

GARBER, Yu.N.; Zelenevskaya, S.I.

Obtaining low temperatures in the heads of laboratory rectification columns. Zav.lab. 26 no.1:116 '60. (MIRA 13:5)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Distillation apparatus)

GARBER, Yu.N.; ZELENEVSKAYA, S.I.

Relationship between the index of refraction and the composition of some binary systems. Zhur.fiz.khim. 35 no.9:2114-2115 '61. (MIRA 14:10)
(Systems (Chemistry))
(Refraction)

S/068/61/000/012/002/002
E071/E435

AUTHORS: Garber, Yu.N., Candidate of Technical Sciences and Zelenevskaya, S.I.

TITLE: Vapour pressure of light, phenol, naphthalene and absorption oil (creosote oil) fractions of coal tar

PERIODICAL: Koks i khimiya, no.12, 1961, 51-54

TEXT: The dependence of vapour pressure on temperature for typical fractions obtained on usual industrial installations for the continuous distillation of coal tar was determined by the method of phase equilibria, which were determined on a single evaporation apparatus of the МИХМа (MIKhMa) type, previously described (Ref.3: N.M.Karavayev, D.D.Zykov, N.B.Kondukov, Zavodskaya laboratoriya, 1955, no.2, p.245). From the experimental data the enrichment coefficient K and coefficients A and B for the equations characterizing the relationship between vapour pressure and temperature were calculated. The following equations are valid:

$$\lg P = \frac{K}{T} + B \qquad (3)$$

Card 1/ 3

Vapour pressure of light ...

and

$$\lg P = -\frac{0.05223}{T} A + B \qquad (4)$$

where P - vapour pressure, K - enrichment coefficient, A and B - constants characteristic for a given fraction. The values of the constants are as follows:

Table 2

Fraction	Mean coefficient of enrichment (K)	Coefficient for Eq.(4)	
		A	B
Absorption oil	3.13	45053.41	7.1803
Phenol oil	1.89	44369.04	7.8721
Light fraction	14.07	55185.33	10.0083

Card 2/3

Using the above coefficients, the mean boiling temperatures of phenol and absorption oil fractions were calculated. These temperatures plotted against molecular weight gave a straight line corresponding to data obtained earlier (Ref.1: Yu.N.Garber, D.D.Zykov, N.M.Karavayev. Izv. AN SSSR, OTN, 1956, no.4, p.10). In view of this straight line relationship, the mean vapour pressure of the naphthalene fraction will differ little from the vapour pressure of naphthalene and, therefore, the latter can be used for the design purposes. The laboratory workers L.L.Grushkina, A.M.Revenko and S.G.Melamed participated in the experiments. There are 7 figures, 3 tables and 7 references: 6 Soviet-bloc and 1 non-Soviet-bloc. The reference to an English language publication reads as follows: Ref.7: G.W.Thomson, Chemical Reviews, v.38, no.1, 1946, 1-38.

ASSOCIATION: Kuznetskiy filial VUKhINa (Kuznetsk Branch of VUKhIN)

ZELENEVSKIY, V.A., inzhener; KNOHRE, V.E., inzhener.

Experience in the reconstruction of the arterial highways leading out of Moscow. Gor.khoz.Mosk. 28 no.1:18-21 Ja '54. (MLRA 7:2)
(Moscow--Road construction) (Road construction--Moscow)

ZELENEVSKIY, V.A., inzh.; FILIMONOV, V.A., inzh.

Ways of improving the planning of engineering communications in Moscow. Gor.khoz.Mosk. 36 no.6:19-22 Je '62. (MIRA 15:8)
(Moscow—Municipal engineering)

ZELENEVSKIY, V.A., inzh.; LANTSBERG, Yu.S., inzh.

Snow removal system in Moscow. Gor.khoz.Mosk. 33 no.1:31-38 Ja '59.
(MIRA 12:3)

(Moscow--Snow removal)

ZELENEVSKIY, V.A., inzh.

Constructing roads in residential blocks built by the method of mass construction. Gor. khoz. Mosk. 33 no.3:10-11 Mr '59. (MIRA 12:5)

(Moscow--Road construction)

STRAKHOV, K.I.; ZELENEVSKIY, V.A., inzhener; LEBEDEV, N.V., inzhener.

Review of K.I.Strakhov's book "City Street Planning." Gor.khoz. Mosk. 27 no.12:34-35 D '53. (MLRA 6:12)
(Streets) (City planning) (Strakhov, K.I.)

SAKHAROV, V., inzhener; SMIRNOV, L., inzhener; ZELENEVSKIY, V., inzhener; KARAGODIN, V., inzhener; KNORRE, V., inzhener; LEBEDEV, N., inzhener; AKSEL'ROD, L., inzhener [reviewers]; STRAMENTOV, A.Ye., professor, doktor tekhnicheskikh nauk [author]; BABKOV, V.F., dotsent, kandidat tekhnicheskikh nauk [redaktor].

Review of A.E.Stramentov's book "City Roads." V.Sakharov, L.Smirnov, V.Zelenevskii, V.Karagodin, V.Knorre, N.Lebedev, L.Aksel'rod. Gor.khoz. Mosk. 25 no.9:34-35 S '51. (MLRA 6:11)

(Road construction)

ZELENEVSKIY, V.A., inzh.

Costs and the quality of road construction. Gor.khoz.Mosk. 34 no.6:33-35 Je '60. (MIRA 13:7)
(Roads--Estimates and costs)

ZELENEVSKIY, V.A., inzhener.

Construction of approaches and roads to the stadium in Luzhniki. Gor. khoz.Mosk.30 no.3:17-19 Mr '56. (MIRA 9:7)
(Moscow--Road construction) (Moscow--Stadiums)

ZELENEVSKIY, V.A., inzhener.

Draining of rain-waters from house roofs. Gor.khoz.Mosk. 27 no. 3:25-28 Mr '53. (MLRA 6:5)

(Drainage, House)

ZELENEYEV, V.A.; VOROB'YEV, A.I.

Introducing the plastic flow method for hot forming. (MLRA 9:10)
Priborostroenie no.9:24-25 S '56.

(Forging)

VOROB'YEV, A.I.; ZELENEYEV, V.A.

Using rams for drawing graduation lines. Stan. i instr. 27 no.11:31 N '56. (MIRA 10:1)

(Calibration)

ZELENEYEV, V. A.

AUTHOR: Zeleneyev, V.A., Engineer 117-2-4/29

TITLE: Universal Rivet-Stamping Die (Universal'nyy shtamp dlya izgotovleniya zaklepok)

PERIODICAL: Mashinostroitel', 1958, # 2, pp 11 - 12 (USSR)

ABSTRACT: This article gives detailed drawings and operative information on a new automatic die for stamping rivets from wire on a universal 75-ton crank press. The first rivet at the start of operation, requires three press strokes, after which only one press stroke is needed for each rivet. The production capacity of the die depends on the press design, i.e. the number of double strokes per minute.

There are 4 drawings.

AVAILABLE: Library of Congress

Card 1/1

ZELENEYEV, V. A.

VOROB'YEV, A.I.; ZELENEYEV, V.A.

Casting steel thimbles. Mashinostroitel' no.5:39-40 My '57.
(Steel castings) (MLRA 10:6)

ZELENEYEN, V.A

VOROB'YEV, A.I., ZELENEYEV, V.A.

Multiedged form cutting disks. Priborostroenie no.1:29 Ja '57. (MLRA 10:4)
(Cutting tools)

Zeleneyev, V. A.

137-1957-12-24020

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 160 (USSR)

AUTHORS: Vorob'yev, A. I., Zeleneyev, V. A.

TITLE: The Production of Steel Ladles (Izgotovleniye stal'nykh kovshey)

PERIODICAL: Mashinostroitel', 1957, Nr 5, pp 39-40

ABSTRACT: The previously prevailing technology in the manufacture of steel ladles (SL) was very wasteful of labor and required large amounts of special technological equipment. A new method has been developed for the manufacture of SL's by means of investment casting. A mold consisting of three units and designed for the investment casting of the SL is presented. This method curtails the expenditure of labor in the production of SL's.

A. S.

1. Ladles-Production 2. Steel-Casting

Card 1/1

VOROB'YEV, A.I.; ZELENEYEV, V.A., inzh.

Attachment for boring internal spherical surfaces. Mashinostroitel' no.11:23-24 N '58. (MIRA 11:12)
(Drilling and boring machinery)

15(8)
AUTHOR: Zeleneyev, V. A., Engineer SOV/119-58-12-7/13

TITLE: Technology of the Production of Parts From Eskapon (Tekhnologiya izgotovleniya detaley iz eskapona)

PERIODICAL: Priborostroyeniye, 1958, Nr 12, pp 18-21 (USSR)

ABSTRACT: Eskapon is produced by the thermal treatment of synthetic butadiene-rubber. Parts made from "Eskapon" may be produced by a mechanical treatment of pressed and polymerized semi-finished products. "Eskapon" possesses the following properties:

Rockwell hardness	85-95
ultimate bending strength: kg/cm^2	500-600
ultimate tensile strength: kg/cm^2	>500
heat resistivity (Martens) in °C	>130
specific electric surface resistance in Ω	$>10^{15}$
specific electric bulk resistance in Ω.cm	$>10^{14}$
$tg\,\delta$ at 10^6 cy	0.0013
dielectric constant at 10^6 cy	2.7 - 3
electric breakdown strength in transformer oil in kV/mm	30-35

Card 1/3

specific weight g/cm^3	1.1 - 1.3
shrinkage in %	5 - 8

Synthetic rubber of the types R-40, RD-35, TU MKhI is used as a source material. It is cut and filled into a mold pre-heated to 80-100°C. The closed mold is placed into a drying oven, where it remains for 30-40 minutes at a temperature of 140 to 200°C. Subsequently pressing is carried out at a specific pressure of 50 to 200 kg/m^2. As soon as there is no longer any space between the matrix and the die, the upper and the lower parts of the mold are rigidly connected. The mold is then taken out of the press and is polymerized in a drying oven heated to 140-200°C. The polymerization conditions depend upon the dimensions of the parts produced and are given in tables. It is important to maintain a constant current of warm air around the mold in the drying oven. The specimens are cooled at a rate of 60°C per hour, starting from 200°C. As soon as the pressed part has attained a temperature of 50-60°C it is taken out of the mold, cleaned and can either be packed or subjected to further treatment. If the semi-finished products have been

mechanically treated, the finished parts are polymerized a second time. Cylindrical parts are mounted on a suitable shaft, plate shaped parts are clamped between polished metal plates, and single parts of a complicated structure are embedded in completely dry and pure sand. Polymerization is now carried out a second time in a drying oven, for which process conditions are also given in a table. In the subsequent cooling process conditions must be strictly complied with down to a temperature of 80°C . After cooling, the parts are strung on to a wire and are dipped into transformer oil heated to 130°. Dipping times are shown in a table. There are 3 figures and 3 tables.

ZELENEYEV, V.A., inzh.; TIMOFEYEV, V.A.

Polishing parts on centerless grinding machines. Mashinostroitel' no.12:25-26 D '58. (MIRA 11:12)
(Grinding and polishing)

SOV-117-58-10-20/35

AUTHORS: Frolov, N.I., Zeleneyev, V.A., Engineer

TITLE: Grinding of Non-Ferrous Metal Alloys (Shlifovaniye tsvetnykh splavov)

PERIODICAL: Mashinostroitel', 1958, Nr 10, pp 26-27 (USSR)

ABSTRACT: Investigations were carried out on the grinding processes of parts of non-ferrous alloys, in order to have relevant manual operations changed over to machine-grinding on circular, plain and centerless grinding machines. With respect to material, quality and performances of the polishing disks, the types KCh of black carborundum and E of normal electrocondum grains were found to be the best. The former are recommended for grinding of L62 brass, the latter for Ls59-1 bronze and brass. Soft disks yielded the best results with all parts of non-ferrous alloys. For grinding of L68 and L62 brass, disks of M2 and SM1 hardness should be used, for bronze and LS-59-1 brass, disks of SM1 and SM2 hardness. Tolerances occurring in practical grinding of non-ferrous alloys

Card 1/2

are given in table 1, the permissible cutting depth in table 2. Rotation speed of the polishing disk is 28 to 30 m per second in all cases. Additional information is given on grinding of diverse shapes and parts of non-ferrous alloys other than bronze and brass. There are 2 tables and 1 diagram.

1. Alloys--Machining 2. Grinders--Performance

VOROB'YEV, A.I.; ZELENEYEV, V.A.

Automatic production of band saws. Mashinostroitel' no.3: 6-7 Mr '60. (MIRA 13:6)
(Band saws)

AUTHOR: Zeleneyev, V.A., Engineer, SOV-117-58-4-12/21

TITLE: Lay-on Jigs (Nakladnyye konduktory)

PERIODICAL: Mashinostroitel', 1958, Nr 4, p 34 (USSR)

ABSTRACT: The article presents information on drill jigs for drilling holes located in circles. Two sets of jigs with different hole-circle radii are described and illustrated. Work time economy and higher accuracy achieved by the use of drill jigs instead of the old indexing operations are pointed out. There is 1 set of drawings.

1. Drilling machines--Equipment 2. Drilling machines--Operation

Card 1/1

SOV/117-58-11-19/36

AUTHORS: Vorob'yev, A.I., and Zeleneyev, V.A., Engineer

TITLE: A Device for Boring Inner Spherical Surfaces (Prisposobleniye dlya rastochki vnutrennikh sfericheskikh poverkhnostey)

PERIODICAL: Mashinostroitel', 1958, Nr 11, pp 23 - 24 (USSR)

ABSTRACT: A special device has been developed for the machining of spherical surfaces in machine parts. The detail is moved on a turning table. The depths of cutting are controlled by a micrometer. The device is installed on a horizontal milling machine. The turning table turns clockwise, the detail counter-clockwise. There is 1 set of diagrams.

1. Milling machines--Equipment 2. Cutting tools---Control
3. Metals--Machining

Card 1/1

FROLOV, N.I.; ZELENEYEV, V.A.

Grinding nonferrous alloys. Mashinostroitel' no.10:26-27 O '58. (MIRA 11:10)

(Grinding and polishing)

SOV/117-58-12-18/36

AUTHORS: Zeleneyev, V.A., Engineer and Timofeyev, V.A.

TITLE: The Polishing of Parts on a Centerless Grinding Machine (Polirovaniye detaley na bestsentrovo-shlifoval'nom stanke)

PERIODICAL: Mashinostroitel', 1958, Nr 12, pp 25 - 26 (USSR)

ABSTRACT: A new mechanized method of grinding and polishing on a centerless grinder, of circular "D1T" aluminum alloy parts 30 mm in diameter and 900 mm length, was introduced into practical use. Grinding and polishing is carried out by two operations with the use of special grinding or polishing disks. The first operation (grinding) is performed with the driving disk and the second operation (polishing) with the driving and polishing disks. They are of similar design, but the grinding disk is coated with an abrasive layer. The smoothness of the polished surface is equal to that obtained be a polishing machine. The technological process and the setting of the device are simple and do not require highly qualified workers. There are 3 diagrams.

Card 1/1

ZELENGUR, N.Ye., kand.sel'skokhozyaystvennykh nauk

Use of a synthetic film for achieving an early harvest of watermelons and melons. Biol. v shkole no.5:49-51 S-O '62. (MIRA 16:2)

1. Adygeyskiy pedagogicheskiy institut.
(Melons)
(Cloche gardening)

GARBER, Yu.N.; ZELENEVSKAYA, S.I.

Azeotropic system n-hexane - benzene. Zhur. prikl. khim. 36 no. 10:2306-2308 O '63. (MIRA 17:1)

J

Country : USSR
Category: Soil Science. Organic Fertilizers.

Abs Jour: RZhBiol., No 14, 1958, No 63118.

Author : Zelengur, N. Ye.; Razlukina, M.L.
Inst : Far East Scientific-Research Institute of Agriculture
Title : The Utilization of Local Fertilizers on Meadow-Soddy Soils of Sakhalin.

Orig Pub: Dyul. nauchno-tekhn. inform. Dal'ne-vost n.-i. in-ta s. kh., 1957, 3, 17-19

Abstract: According to the results of experiments by the Sakhalinskaya Experimental Station on meadow-soddy heavy soil, typical for the island, with increased acidity, the cabbage-crop-increase average for 3 years (1952-1954) was: from 20 tons of peat-manure mixture, 116.1 centners/hectare; from 20 tons of peat-manure mixture, 92.5 as

Card : 1/2

J

Country : USSR
Category: Soil Science. Organic Fertilizers.

Abs Jour: RZhBiol., No 14, 1958, No 63118

opposed to the increase from 20 tons of manure of 155.1 centners/hectare; control harvests yielded 437.8 centners/hectare. The effectiveness of peat-manure and peat-NPK composts was increased by the addition of unsalted fish manure, the waste product of the fish industry. -- N.N. Sokolov

Card : 2/2

ZELENGUR, N., kandidat sel'skokhozyaystvennykh nauk.

Sakhalin should produce its own vegetable seeds. Nauka i pered.op.v sel'khoz. 7 no.7:74 Jl '57. (MLRA 10:8)
(Sakhalin--Vegetable gardening)

COUNTRY : USSR
CATEGORY : Cultivated Plants. Potatoes. Vegetables. Cucurbits.
ABS. JOURN. : Ref Zhur-Biologiya, No. 1, 1959, No.3662

AUTHOR : Kalengur, N.Ye.
INST. :
TITLE : An experiment in the cultivation of melons on the island of Sakhalin.

ORIG. PUB.. Sad i ogorod, 1958, No.1, 34-36

ABSTRACT On the island of Sakhalin watermelons and muskmelons are cultivated under glass in beds of two and three crop rotations. The Sakhalin agricultural experimental station has shown that in the extreme southern and south-western districts of the island, watermelons and muskmelons can also be cultivated in the open soil. The most suitable watermelon variation are: Shuga, Skorospelka Skvirskaya Pobeditel 395, Limonets khutora, Platkovska; the muskmelon variation

CARD: 1/2

AUTHOR :
TITLE :

USSR/Biology Ref Zhur-Biologiya, No. 1, 1959, No. 1682

ABSTRACT: are: Gruntovaya gribovskaya and Gribovskaya from the nursery and Kriktsatidnevka. Under melons a mixture of organic and mineral fertilizers are introduced and there are transplanted the 25-30 day plantings, cultivated in little pots rich in nutrition. With hothouse plants of watermelons and muskmelons, the pot plantings are also transplanted and the plants are taken care of elaborately. During the second 10 days of August the watermelons ripen; the crop from one bed amounts to 10-12 kg. -- Ye.A. Okorokova

CARD : 2/2

ZELENGUR, N. Ye.

USSR/Cultivated Plants. Potatoes. Vegetables. Melons. M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68171

Author : Zelengur, N. Ye.; Gontsarchik, I. E.
Inst : Far Eastern Scientific Research Institute of Agriculture.
Title : The Trench Method of Preserving the Pericarps of Two-Year Vegetable Crops.

Orig Pub : Byul. nauchno-tekhn. inform. Dal'nevost. n.-i. in-ta s. kh., 1957, No 4, 21-24

Abstract : From 1952 to 1956 the Sakhalin Experimental Station studied methods of preserving seed plants of the Slava cabbage variety, Bordeaux beets, Shantene carrots, and Shvedskaya turnips. In a vegetable storehouse 96.3 percent of the cabbage ovaries were preserved; in a trench with exhaust pipes and covered with

Card : 1/3

USSR/Cultivated Plants. Potatoes. Vegetables. Melons. M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68171

lathes, straw, and earth, 93.6 percent were preserved, and in a trench without exhaust pipes and with layers of earth in between the cabbages 78.5 percent were preserved. The seed yields from the first two variants were almost identical (24.2 and 24.9 centners/hectare), in the third 22.2, and in the last 16.2 centners/hectare. Carrots were preserved better in the trench (5 percent loss) than in the storehouse (23 percent waste); the seed yield from carrot roots stored in the trench was 6.69 centners/hectare, and from those stored in the vegetable storehouse -- 4.67 centners/hectare; when turnip and beet seed plants were stored

Card. : 2/3

USSR/Cultivated Plants. Potatoes. Vegetables. Melons. M

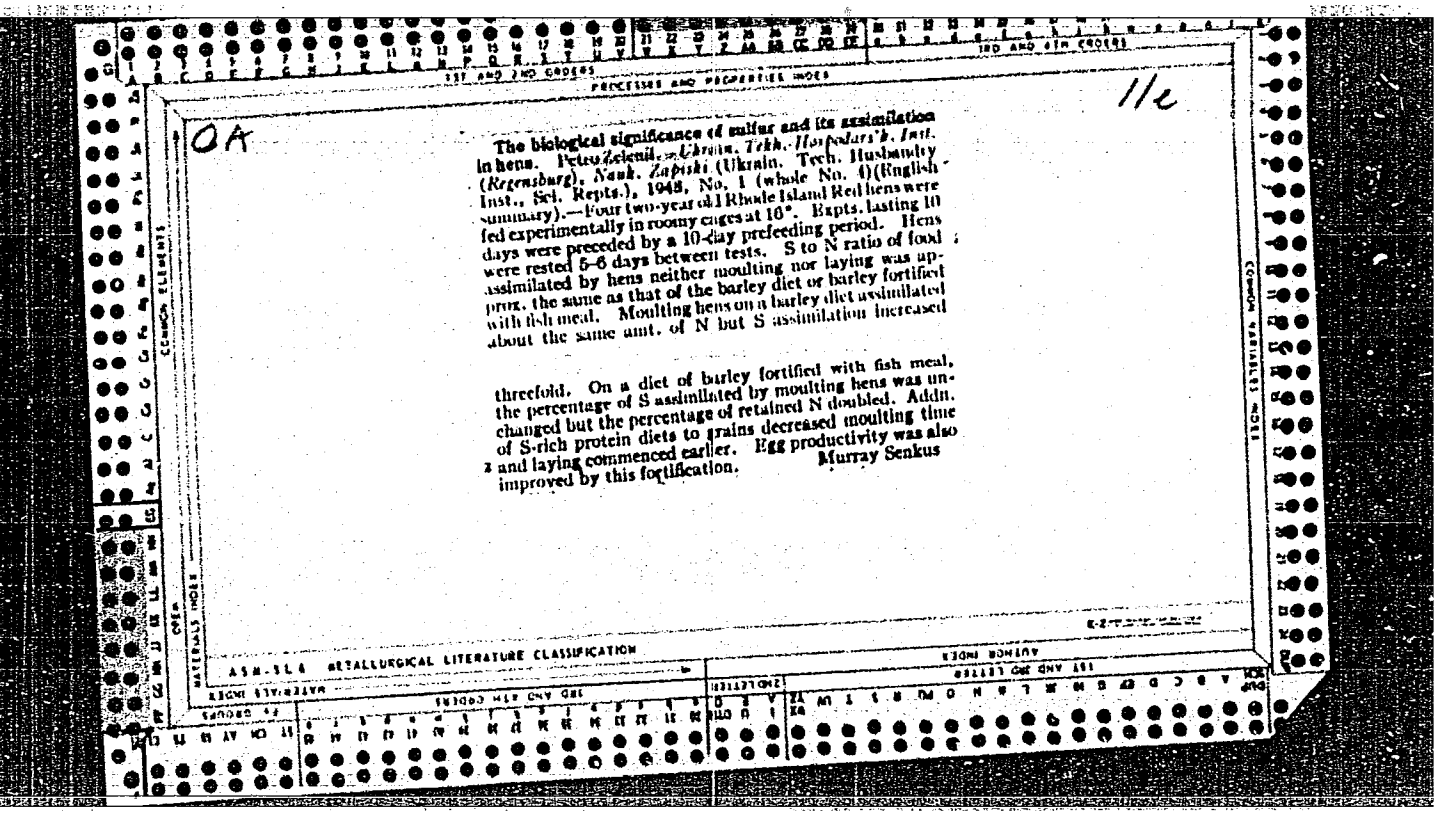
Abs Jour : Ref Zhur-Biol., No 15, 1958, 68171

in the vegetable storehouse the losses were slightly lower than when stored in the trench; the seed yields were, correspondingly, 0.28-2 centners/hectare higher. -- Ye. A. Okorokova

Card : 3/3

ZELENGUROV, V. M.

Cand Med Sci - (diss) "Forensic medical examinations in cases of automobile accidents based on preliminary investigation." L'vov, 1961. 22 pp; (Kiev Order of Labor Red Banner Medical Inst imeni Academician A. A. Bogomolets); 250 copies; free;(KL, 6-61 sup, 237)



0A

11c

The biological significance of sulfur and its assimilation in hens. Petro Zelenii. *Ukrain. Tekh. Hospodars'k. Inst. (Regensburg), Nauk. Zapiski* (Ukrain. Tech. Husbandry Inst., Sci. Repts.), 1948, No. 1 (whole No. 4)(English summary).—Four (two-year old) Rhode Island Red hens were fed experimentally in roomy cages at 10°. Expts. lasting 10 days were preceded by a 10-day prefeeding period. Hens were rested 5–6 days between tests. S to N ratio of food assimilated by hens neither moulting nor laying was approx. the same as that of the barley diet or barley fortified with fish meal. Moulting hens on a barley diet assimilated about the same amt. of N but S assimilation increased threefold. On a diet of barley fortified with fish meal, the percentage of S assimilated by moulting hens was unchanged but the percentage of retained N doubled. Addn. of S-rich protein diets to grains decreased moulting time and laying commenced earlier. Egg productivity was also improved by this fortification. Murray Senkus

LUKIN, A.M.; ZELENICHKO, [illegible]; CHERNYSHEVA, T.V.

Chlorophosphonazo III, a new reagent for strontium. Zhur. anal. khim. 19 no.12:1513-1515 '64 (MIRA 18:1)

1. All-Union Scientific-Research Institute of Chemical Reagents and Specially Pure Chemicals, Moscow.

MALY, Antonin; ZELENKA, Ivan

Soya protein. Listy cukrovar 81 no.3:58-64 Mr '65.

1. Research Worksite of the Ceskoslovenske cokoladovny National Enterprise, Modrany.

ZELENIKA, Duro, d-r

Clinical contributions to diabetes insipidus. Med.arh., Sarajevo 14 no.6:93-96 N-D '60.

1. II Interna klinika Medicinskog fakulteta u Sarajevu (Sef: prof. d-r Miron Simic)
(DIABETES INSIPIDUS, case reports)

MIKSIC, Janko, dr.; ZELENIKA, Duro, dr.

Heat stroke and insolation. Vojnosanit. pregl. 20 no.6:374-376 Je '63.

1. Opsta bolnica u Zenici, Interno odeljenje.
(HEAT EXHAUSTION) (SUNSTROKE)

S

POPOVIC, V., dr.; ZELENIKA, D. dr.

Sheehan's syndrome. (Contribution to the pathogenesis and clinical aspects.). Med. arh. 18 no.1:73-78 Ja-F '64.

1. II interna klinika Medicinskog fakulteta u Sarajevu (Upravnik: Prof. dr Miron Simic).

MIKSIC, J.; TOMIC,S.; ZELENIKA, D.

Ethiopathogenic and clinical studies on necrosing arteritis.
Med. arh. 19 no,1:59-64 Ja-F '65

1. Interno odjeljenje Opste bolnice u Zenici (Sef.: Dr. Janko Miksic).

ZELENIKHIN, A. I., CAND TEC SCI, "RATING THE ~~QUTY~~ capacity OF A DIESEL ENGINE OPERATING on A SCREW PROPELLER UNDER MARINE CONDITIONS, ALONG ~~INCIDENT~~ oblique PARAMETERS." LENINGRAD, 1960. (LENINGRAD SHIPBUILDING INST). (KL, 2-61, 208).

ZELENIKHIN, A.I., inzh.

Automatic control of the operating conditions of four-stroke river vessel diesels without supercharging and with gas fuel pumps in variable meteorological conditions. Trudy LIVT no.10: 20-31 '61. (MIRA 14:9)

(Marine diesel engines)
(Automatic control)

ZELENIN, A. A.

"Food Value of Local Mineral Admixtures for Growing Swine." Cand Agr Sci, All-Union Sci Res Inst of Animal Husbandry, Moscow, 1955. (KL, No 17, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

AUTHORS: Irikhimovich, A. I., Zelenin, A. M. 20-114-3-56/60

TITLE: Histological Changes in the Hypophysis During the Process of the Sexual Maturation of Carp (Gistologicheskiye izmeneniya gipofiza v protsesse polovogo sozrevaniya karpa)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 3, pp. 655-657 (USSR)

ABSTRACT: The hypophysis of bone fish secretes a gonadotropic hormone, under the influence of which the gonadal maturation is completed, and further also the processes of ovulation and spawning take place. These processes are in correlation not only with the functional but also with the histological changes in the hypophysis. During the experiments carried out in context with the paper under review those cells in the hypophysis were localized in fish which produce the gonadotropic hormone. So far, the histological changes of the hypophysis were investigated in sexually mature carp during the different seasons of the year. But because the hypophysis of fish, as well as of other vertebrates, produces not only the gonadotropic hormone, it would be possible that the gonadotropic function of the hypophysis has been distorted by the excretion of other

Card 1/3

Histological Changes in the Hypophysis During the Process of the Sexual Maturation of Carp

hormones. The localization of cells which produce other hormones in bone fish is unknown. Therefore it sill is difficult to separate from each other the cytological changes which are connected with the manifold functions of the hypophysis. It appeared to be of advantage to investigate these changes in carp (being fish that spawn in portions). That these changes are not connected with sexual cycles but rather with processes of sexual maturation was another reason for this investigation. Carp of the following ages were used in the tests: less than one year, one year old, two summers old, two years old, and three summers old. As the result of these investigations the paper under review states that the histological state of the hypophysical transition zone in carp - and probably also in other fish spawning in portions - offers no indication that there exists a thyreotropic function of the hypophysis in connection with the cell holocriny before and after spawning. This question can only be answered with respect to sexually immature fish. The thyreotropic function probably (on the basis of analogy) is connected with basophilics of the transition zone, this being the case also with other vertebrates. There are 4 figures and 17 references,

Histological Changes in the Hypophysis During the Process of the Sexual Maturation of Carp 20-114-3-56/60

8 of which are Soviet.

ASSOCIATION: Moldavian Branch AS USSR
(Moldavskiy filial Akademii nauk SSSR)

PRESENTED: January 8, 1957, by I. I. Shmal'gauzen, Member of the Academy

SUBMITTED: January 3, 1957

Card 3/3

ZELENIN, A.N., Cand Bio Sci—(diss) "Analysis of the sexual cycle and spawning of the carp." Mos, 1958. 16 pp (Acad Sci USSR. Inst of Morphology of Animals im A.N. Severtsov), 100 copies (KL,22-58,105)

-57-

USSR/General Biology - Individual Development. Sex Cells. B.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 94612

Author : Zelenin, A.M.

Inst : Moldavian Affiliate AS USSR

Title : Dependence of Ovogensis on Growth Tempo in Carp.

Orig Pub : Izv. Mold. fil . An SSSR, 1957, No 2-3, 139-149

Abstract : Dependence of oogensis on the growth tempos was investigated in scaly and mirror carp which were raised in the Faleshtskiy and Glodyanskiy fish farm and kolkhoz reservoir of Kotovskiy Rayon, Moldavain SSR. Observations were conducted starting with fish under a year and up to three year olds. In those under one year with the usual growth rate (I), oocytes in the first year reached period of little growth; in those growing intensively (II), the basic mass of gonocytes was found in the stage of the

Card 1/2

ZELENIN, A.M.

IRIKHIMOVICH, A.I.; ZELENIN, A.M.

Histological changes occurring in the pituitary body in the process of sexual maturation of Cyprinus carpio. Dokl. AN SSSR 114 no.3:655-657 My '57. (MLRA 10:8)

1. Moldavskiy filial Akademii nauk SSSR. Predstavleno akademikom I.I. Shmal'gauzenom.

(PITUITARY BODY) (CARP)

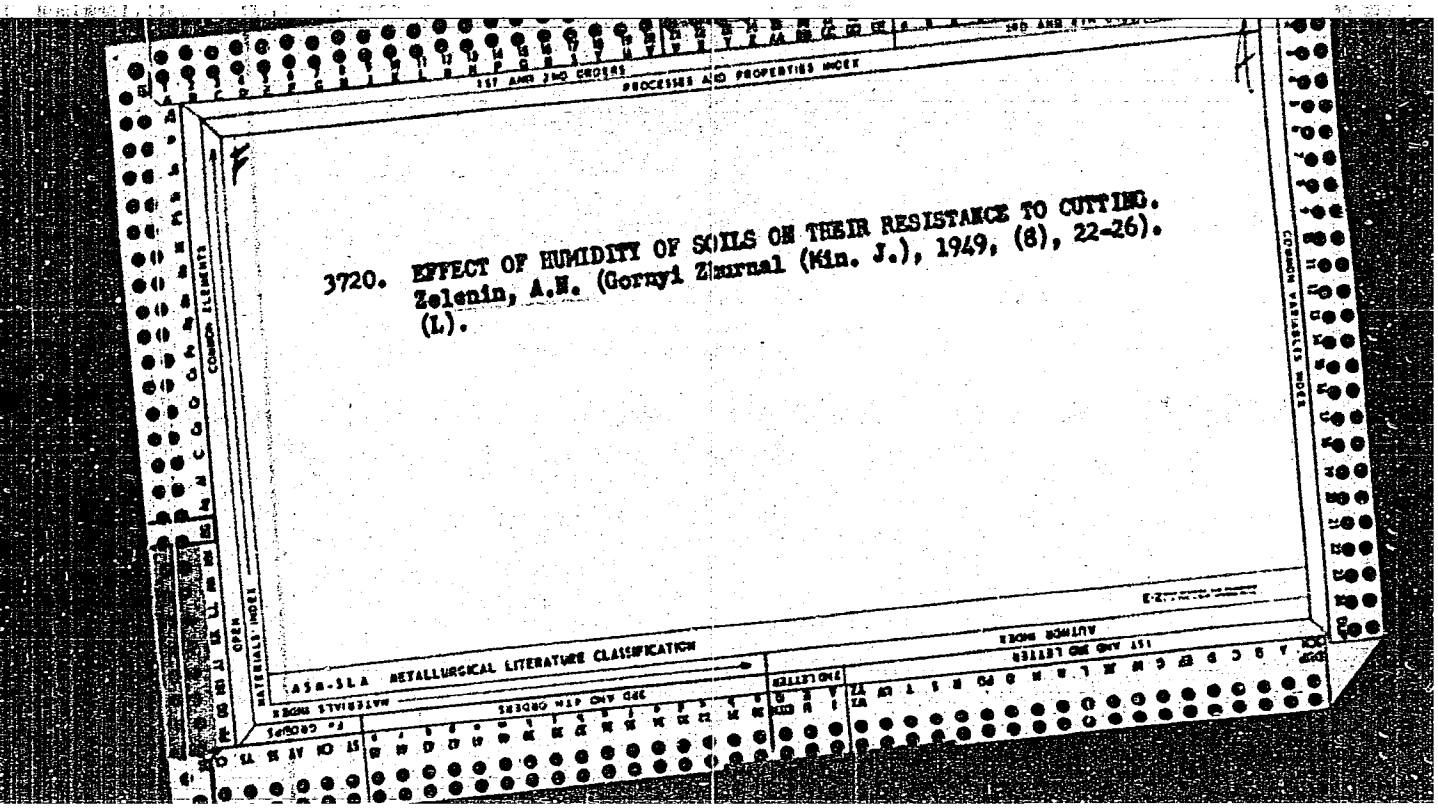
IRIKHIMOVICH, A.I.; ZELENIN, A.M.; TYUTYUNIK, S.N.

Further investigations of the biological foundations of the culture of yearling carp. Trudy Inst. biol. Mold. fil. AN SSSR 2 no.2:15-24 '6C. (MIRA 15:7)

(Moldavia--Carp)

ZELENIN, A. N.

"Basic Problems in Cutting Ground", Iz, Ak. Nauk SSSR, Otdel. Tekh. Nauk,7, 1949.



3720. EFFECT OF HUMIDITY OF SOILS ON THEIR RESISTANCE TO CUTTING. Zelenin, A.N. (Gornyi Zhurnal (Min. J.), 1949, (8), 22-26). (L).

ZELENIN, A.M.

Nature of the reproduction of bream (Abramis brama L.) in Dubossary Reservoir. Trudy Inst. biol. Mold. fil. AN SSSR 2 no.1: 79-91 '60. (MIRA 16:4)

(DUBOSSARY RESERVOIR--BREAM)

ZELENIN, A. N.

Physical principles of the theory of earthworks (cutting) Moskva, Izd-vo Akademii nauk SSSR, 1950. 353 p. (51-28321)

TA715.Z4

ZELENIN, A.N., doktor tekhn.nauk (Moskva); VESELOV, G.M., kand.tekhn. nauk (Moskva); STEPANOV, A.P., inzh. (Moskva)

Features of the change in strength of frozen ground following deterioration. Stroi. pred. neft. prom. 2 no.12:7-11 D '57. (MIRA 11:3)

(Frozen ground)

ZELENIN, A.N.; VESELOV, G.M.

Investigation on cutting frozen ground. Trudy Inst. gor. dela (MLRA 10:6)
4:57-72 '57.
(Mining engineering) (Frozen ground)

ZELENIN, A. N.

3-6-23/29

AUTHOR: Zelenin, A. N., Secretary of the VLKSM Committee, Moscow State University imeni M. V. Lomonosov

TITLE: The Moscow University Awaits the Guests (Moskovskiy universitet zhdet gostey)

PERIODICAL: Vestnik Vysshey Shkoly, 1957, # 6, pp 77-80 (USSR)

ABSTRACT: The articles describes the preparations made for the 6th World Festival of Youth and Students in Moscow to expound the struggle for peace. Moscow State University was scheduled to host 11 out of the 20 international student seminars. University commissions to prepare these seminars and meetings consisted of students, and young university and other Vuz instructors and headed by leading university scientists. Professor D. S. Karev presided over the commission organizing the law seminar. Professor R. M. Samarin led the literature seminar, and Professor G. P. Gorshkov was in charge of the commission preparing the meeting of student-geologists. The article also gives an account of the pre-festival entertainments which have already taken place, and of the lectures read to acquaint the students with the countries of the delegates.

Card 1/2

The Moscow University Awaits the Guests 3-6-23/29

ASSOCIATION: VLKSM Committee of the Moscow State University imeni M. V. Lomonosov (Komitet VLKSM Moskovskogo gosudarstvenno-go universiteta imeni M. V. Lomonosova)

AVAILABLE: Library of Congress

Card 2/2

ZELENIN, A.N.

SOV/3o-58-8-33/43

AUTHOR: Loguntsov, B. M.

TITLE: On Problems of Rock Disintegration (Voprosy razrusheniya gornykh porod) Transactions of the Conference in the Mining Institute (Soveshchaniye v Institute gornogo dela)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 8, pp. 13o - 132 (USSR)

ABSTRACT: This coordination conference was held from May, 2o - 22. It was called by the Institut gornogo dela Akademii nauk SSSR (Mining Institute AS USSR). Representatives of scientific research institutes, of universities, of planning bureaux and manufacturing plants participated in the work. The following lectures were held:
B.M.Leybov on methods of evaluating coal structure.
M.M.Protod'yakonov and B.M.Loguntsov on the standardization and the establishment of a uniform scale of drilling work.
A.N.Zelenin on a more precise method of the determination of limit values of rock stress values.
V.S.Kravchenko, A.P.Obraztsov and D.A.Denisov on the application of magnetic high-frequency fields for the breaking

Card 1/2

up of quartzites from the anomalous magnetic ores from Kursk and from ores of other sites.
A.P.Ostrovskiy, A.I.Gol'binder and A.A.Pavlichenko on new methods of blasting in the drift advance of bore holes.
M.I.Koyfman on rules governing the rock disintegration by means of rotating and percussion drilling.
R.M.Eygeles on the dependence of bore thrust on the drill pressure, on the drill speed, on rock properties etc.
Ye.I.Il'nitskaya on mechanical extraction of coal.
N.G.Karatavoy on the specific pressure distribution on the leading edge of the cutter in coal extraction.
At the end of the conference it was emphasized that the majority of research work which has hitherto been conducted was entirely of an experimental nature. Theoretical and experimental research is to be intensified in the future.

ZELENIN, Arkadiy Nikolayevich, prof., doktor tekhn.nauk; SPIVAKOVSKIY, A.O., otv.red.; GORSHKOV, G.B., red.izd-va; KUZ'MIN, I.F., tekhn.red.

[Ground cutting] Rezanie gruntov. Moskva, Izd-vo Akad.nauk SSSR, 1959. 270 p. (MIRA 13:1)

1. Chlen-korrespondent AN SSSR (for Spivakovskiy).
(Boring) (Excavation)

ZEL-ENIN, N.N.

SOV/180-59-1-28/29

AUTHOR: Solomonov, K.S.

TITLE: Conference on the Physics of the Disruption of Rock and Tool Wear (Soveshchaniye po fizike razrusheniya gornykh porod i iznosu instrumentov)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1959, Nr 1, pp 123-124 (USSR)

ABSTRACT: On 18-20 November 1958 a conference was held at the Institut gornogo dela AN SSSR (Mining Institute AS USSR). One group on the physics of rock breakdown, heard the following reports: A.N. Zelenin, (IGD AN SSSR) on "Some Investigations in the Field of Kohr's Ring Construction"; A.F. Baron, VUGI, on "Typical Nature of Effects in the Cutting of Brittle Rocks"; E.Ye. Kyrgies, VNIIBT, on "Mechanism of Rock Breakdown in Static and Dynamic Insertion of Punches"; V.P. Sangyor, NIIOSP, and Shih Chung-han (MIIT) on "Experimental Investigation with the Aid of Radioactive Isotopes of the Process of the Introduction of Symmetrical Wedges (Stamps) into Rocks"; I.M. Matrosov, Tomskiy politekhnicheskiy institut (Tomsk Polytechnical Institute) on "The Breakdown of Rock in Vibration-Rotation Drilling by the Core Method".

Card 1/3

The second group, dealing with tool durability, heard the following reports: A.V. Kunstrov (IMD AN USSR) on "Abrasive Properties of Rocks and their Influence on Drill-Edge Sinking (in Perforation Drilling)"; M.I. Bondarenko, NIIOSP, on "Investigation of Rock-Cutting Tool Wear with the Aid of Radioactive Isotopes"; A.F. Bernshteyn, VUGI, on "Investigation of Tool Durability in the Course of Impact Chipping of Rocks"; V.A. Tarkhov, AISM, on "Main Stages in Cutting-Tool Wear in Stone Cutting and Friction Work"; G.Ye. Kertyk, Novocherkasskiy politekhnicheskiy institut (Novocherkassk Polytechnical Institute) on "Investigation of SHBM-Combine Cutting-Tool Wear"; Y.P. Kriyacko, Opytno-issledovatel'skiy tsekh Kerch'skogo kombinata (Experimental-research department of the Kerch'skiy combine) on "Increasing the Durability of the Drilling Tool and the Drillability of the Carbonidebases of the Kerch'sk Deposits"; and the Engineer on the "Work of Giprouglemash".

Afterwards communications were presented by representatives of the Dneprpetrovskiy gornyy institut (Dnepropetrovsk Mining Institute), Novocherkasskiy politekhnicheskiy

Card 2/3

institut (Novocherkassk Polytechnical Institute), Kharkovskiy gornyy institut (Kharkov Mining Institute), Kazakhskiy gorno-metallurgicheskiy institut (Kazakh Mining and Metallurgical Institute) and others. The conference noted that little work had been done on some of the subjects discussed. It recommended that work on the physics of rock disruption should be carried out mainly at the IGD AN USSR, the Institut geologii i dobychi poleznykh iskopayemykh AN SSSR (Institute of Geology and Extraction of Minerals, AS USSR) VUGI and VNIIBT; and work on tool wear and drilling preferentially at NII, AISM, Giprouglemash, TUGI, VNIIBT and the Institut tverdykh splavov (Hard-Alloy Institute).

Card 3/3

9

ZELENIN, A.N., doktor tekhn.nauk

Present condition and prospects for the development of machines for working frozen ground. Stroi. i dor. mash. 6 no.10:5-7 O '61. (MIRA 14:10)

(Frozen ground)
(Earthmoving machinery)

BARON, Lazar' Izrailevich, prof., doktor tekhn. nauk; LOGUNTSOV, Boris Maksimovich; POZIN, Yevgeniy Zal'manovich; BUCHNEV, V.K., zasl. deyatel' nauki i tekhniki RSFSR, prof., doktor tekhn. nauk, retsenzent; ZELENIN, A.N., prof., doktor tekhn. nauk, retsenzent; GEYMAN, L.M., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.

[Determining properties of rocks; reference book] Opredelenie svoistv gornykh porod; spravochnoe posobie. Pod red. L.I. Barona. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1962. 331 p. (MIRA 15:3)
(Rocks--Testing)

ZELENIN, A.N., doktor tekhn. nauk; SHIOYDO, G.A., inzh.

Mounted rippers for soil ripping. Stroi. i dor. mash. 10 no.4: 17-20 Ap '65. (MIRA 18:5)

ZELENIN, A.N., doktor tekhn. nauk; ROVINSKIY, M.I., kand. tekhn. nauk; ZAKHARCHUK, B.Z., inzh.; TELUSHKIN, V.D., inzh.

Investigating the loosening of limestone. Gor. zhur. no.5:12-14 My '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'nogo i dorozhnogo mashinostroyeniya, Moskva.

ZELENIN, A. N., BAKAKIN, V. P.,

"Prospecting of forzen soils"

report to be submitted for the Intl. Conference on Permafrost, Purdue Univ., Lafayette Indiana, 11-15 Nov 63

TETERUK, G.I.; ZAVYAZKIN, P.G.; ALIYEV, T.M.; ALIYEV, A.G.; MELIK-SHAKHNAZAROV, A.M.; ARULIS, B.K.; BARTENEV, G.M.; YEL'KIN, A.I.; KOSTIN, V.I.; KHARKHARDIN, S.I.; SERGEYEV, A.I.; VARTANOV, S.Kh.; PRIMUSHKIN, L.I.; MOLODTSOV, A.A.; SHMELEV, N.V.; ROVINSKIY, M.I.; ABRAMOV, N.N.; YEROFEYEV, L.V.; RYAKHIN, V.A.; ZELENIN, A.N.; BERKMAN, I.I.

Patent certificates for Soviet inventions. Stroi. truboprov. 9 no.5: 35-36 My '64. (MIRA 17:9)

29774
S/194/61/000/006/068/077
D201/D302

6.4800

AUTHOR: Zelenin, A.P.

TITLE: Increasing frequency selectivity of systems by attenuating the unwanted modulation of the signal. Part I. Linear theory

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1961, 10, abstract 6 K68 (Tr. Gor'kovsk. politekhn. in-ta, 1960, 16, no. 2, 17-60)

TEXT: The theoretical analysis is given of the method of increasing the selectivity of linear and non-linear systems. The performance of the system of attenuation of parasitic modulation, consisting of a controlled slope valve and a tuned oscillating circuit, is described in the general case by a most complicated non-linear integro-differential equation. In a particular case, when the modulation and noise level is small enough, when compared to the level of the unmodulated carrier, the equation mentioned above may be reduced

Card 1/3

Increasing frequency selectivity...

to a linear integro-differential equation with variable parameters and solved by the method suggested in their work by D.V. Ageyev and Ya.G. Rodinov (see R. Zh. E. 1960, no. 5, 6.3676). In general the solution is possible of simple non-linear equations, into which the complex general equation may be resolved as a result of dividing the system into 2 separate channels and using a spectral method of solution. The formulae obtained for AM and FM transfer junctions permit the evaluation of equivalent frequency responses which determine the selectivity of the amplitude and frequency channels of modulating channels of modulating frequencies. The expressions for the equivalent frequency responses, derived in the non-linear theory of demodulation method agree with the corresponding expressions obtained by the linear method. The shape of the equivalent frequency channel characteristics has been analyzed and methods suggested for improving the selectivity of the system. Certain possible applications are considered of the demodulation method for increasing the selectivity of radio engineering installations based on the properties of the demodulation system. The theory as given can, in the

Card 2/3

29775
S/194/61/000/006/068/077
D201/D302

Increasing frequency selectivity...

opinion of the authors help to establish the quantitative relationships between various el. magnitudes and parameters in systems of reduction of pulse interference in radio receiving equipment and help in analyzing the counter measure methods in radio transmitting installations. A possible variant of the amplitude channel design is given. 5 references. [Abstracter's note: Complete translation]

Card 3/3

31988
S/142/61/004/004/009/018
E192/E382

6,4400

AUTHOR: Zelenin, A.P.

TITLE: Improvement of the frequency-selectivity by suppressing undesirable signal-modulation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v. 4, no. 4, 1961, 453 - 458

TEXT: The method of increasing frequency-selectivity is based on the modulation effect observed in automatic gain-control systems (Ref. 1 - Radio-receiving devices, Svyaz'izdat, 1959). The selective filter is based on a resonance amplifier whose tuned circuit has a low selectivity (or a wide passband). The voltage from the output of the amplifier is applied to an amplitude-detector and the resulting low-frequency voltage, which is proportional to the signal envelope, is applied to the second control grid of the amplifier tube. The slope of the tube and the gain of the amplifier are thus varied. The coupling circuit between the detector and the second grid of the amplifier tube is in the form of a high-pass filter, so that only the undesirable high-frequency components of the amplitude-

Card 1/5

Improvement of ....

modulation vary the amplification of the system. The phase of the voltage at the second grid should be such that the increase in the amplitude is accompanied by reduction in the gain of the stage. The undesirable changes in the output-signal amplitude are thus demodulated, which leads to an increase in the selectivity of the system. In a similar way, it is possible to suppress undesirable frequency-modulation. The output voltage of the amplifier is applied in this case to the frequency-detector and the resulting low-frequency signal is fed to a reactance tube which is connected in parallel with the tuned circuit. The coupling network in this case is also a high-pass filter, whose cut-off frequency is equal to the highest modulating frequency of the signal. It is shown that the equivalent frequency characteristic for the amplitude-modulation suppressing amplifier is in the form:

4

Improvement of ....

$$\frac{K_a(\Omega)}{K_p} = \frac{1}{(1 - cK_R U_{Bb1XO})^2 + \left(\frac{\Omega}{\alpha} - cK_x U_{Bb1XO}\right)^2} \qquad (2)$$

where $K_a(\Omega)$ is the modulus of the transfer coefficient of the system,

K_R, K_x are the real and imaginary components of the transfer function $K_y = K_R + jK_x$ of the control path,

K_p is the gain of the system at the resonance frequency;

U_{BXO} is the amplitude of the signal at the input,

$U_{Bb1XO} = K_p U_{BXO}$ is the amplitude at the output of the system,

$\alpha = \pi \Delta F$ and $c = \Delta s / \Delta U_a S_o$, which is a coefficient dependent on the relative slope of the tube (S_o is the slope at the oprating point).

Card 3/5

Improvement of ....

A similar expression is given for the frequency-modulation suppressing filter. From the above formula, it is found that selectivity of the system depends on the transfer function of the control path and the coefficient c . If the modulation level is low in comparison with the carrier level, it is necessary to take into account the nonlinear distortions and the modulating voltage, which are produced by parametric nonlinearity of the system. The nonlinear and interference distortion can be evaluated comparatively easily. The filters work efficiently in suppressing the undesired modulation only in those cases when the signal exceeds the noise level. Apart from increasing the selectivity, the above systems have a number of other applications. Thus, the amplitude-modulation suppressing filter can be employed as a limiter; similarly, the frequency system can be employed for suppressing the frequency-modulation in amplitude-modulated signals. Secondly, the above demodulation method can be employed to increase the selectivity of the transmitter circuits. The method can also be employed in measuring equipment for suppressing the undesired modulation in signal frequency-generators. D.V.Ageyev is mentioned in the article.

Card 4/5

31988
S/142/61/004/004/009/018
E192/E382

Improvement of ....

There are 4 figures and 6 Soviet-bloc references.

ASSOCIATION: Kafedra radiopriyemnykh ustroystv Gor'kovskogo politekhnicheskogo in-ta im. A.A. Zhdanova (Department of Radio-receiving Devices of Gor'kiy Polytechnical Institute im. A.A. Zhdanov)

SUBMITTED: June 9, 1960 (initially)
October 3, 1960 (after revision)

Card 5/5

ZELENIN, A. P.

Cand Tech Sci - (diss) "Increase of selectivity of radio engineering equipment by suppression of undesirable signal modulation." Moscow, 1961. 15 pp; (Ministry of Communications USSR, Moscow Electrical Engineering Inst of Communications); 150 copies; price not given; (KL, 10-61 sup, 214)

27768
S/058/61/000/007/075/086
A001/A101

6,4400

AUTHOR: Zelenin, A.P.

TITLE: Improving frequency selectivity of systems by means of suppressing undesired signal modulation. Part I. Linear theory

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1961, 325, abstract 7Zh318 ("Tr. Gor'kovsk. politekhn. in-ta", 1960, v. 16, no. 2, 17 - 60)

TEXT: The author considers the theory of a new method of improving selectivity of circuits of radio engineering devices, which is based on suppressing the undesired modulation of signals by automatic control of resonance amplifier parameters. The device by which this method is realized consists of an amplitude channel, in which the gain factor control effects the suppression of undesired amplitude modulation, and a frequency channel, which effects suppression of undesired frequency modulation by controlling the resonance frequency of the oscillation circuit. The main advantage of the method consists in the possibility of obtaining narrow-band resonance equivalent characteristics directly at high working frequencies. Basic drawbacks are: low interference resistance and

Card 1/2

Improving frequency selectivity ...

increase in the level of non-linear signal distortions. The method can be applied to various radio engineering devices, e.g., in transmitters for fighting undesired broadening of radiation spectrum.

A. Zelenin

[Abstracter's note: Complete translation]

Card 2/2

S/194/61/000/007/062/079
D201/D305

9,8270

AUTHOR: Zelenin, A.P.

TITLE: Experimental analysis of the demodulation method of increasing the frequency selectivity of systems

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1961, 11-12, abstract 7 I85 (Tr. Gor'kovsk. politekhn. in-ta, 1960, 16, no. 2, 61-68)

TEXT: The results are given of experimental analysis of a demodulation system (S) suggested so as to increase the selectivity of linear S. The FM and amplitude channels of a demodulation system were experimentally analyzed. The experimental results compared with the theoretical ones confirm in principle the correctness of fundamental assumptions of the theory of the remodulation method, in that there is indeed an increase in the selectivity of linear S. In particular the use was considered of the amplitude channel of S as an AM limiter. It has been possible in this manner to decrease

Card 1/2

S/194/61/000/007/062/079
D201/D305

Experimental analysis...

the parasitic AM from 5 - 10 db (in a single circuit) to 20 - 30 db (in a more complicated system with an amplifier); the experiment has also shown the presence in the demodulation system of signal distortion by noise due to its parametric non-linearity. 1 reference. [Abstracter's note: Complete translation]

VB

Card 2/2

SHUSHIN, V.M.; ZELENIN, A.P.

Method for improving the actual selectivity of an AM signal receiver. Izv. vys. ucheb. zav.; radiotekh. 6 no.3:311-313 My-Je '63. (MIRA 16:9)

1. Rekomendovano Nauchno-issledovatel'skim radiofizicheskim institutom pri Gor'kovskom gosudarstvennom universitete imeni N.I.Lobachevskogo.

(Radio—Receivers and reception)

S/108/63/018/002/009/010
D413/D308

AUTHOR: Zelenin, A. P., Member of the Society (see Association)

TITLE: Transient processes in a servo circuit for small frequency deviations

PERIODICAL: Radiotekhnika, v. 18, no. 2, 1963, 66-69

TEXT: The author proceeds from a suggestion by Ageyev (D. V. Ageyev and Ya. G. Rodionov, ChM-radiopryem so sledyashchey nastroykoy (FM reception with servo tuning), Gosenergoizdat, 1958) that transient processes in a servo circuit for relatively small frequency deviations may be investigated by spectral methods. He takes Ageyev's expression for the complex transfer function of frequency deviation, assumes a control circuit equivalent to a low-frequency RC filter, and derives the transient characteristic of the system: he discusses the various possible cases of this and shows typical calculated characteristics graphically. Finally, he gives expressions for the response of the circuit to EMFs whose

Card 1/2